

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C12N 15/12, C07K 14/705, A01K 67/027, G01N 33/68		A1	(11) International Publication Number: WO 99/60123
			(43) International Publication Date: 25 November 1999 (25.11.99)
(21) International Application Number: PCT/US99/10619		(74) Agents: MILLER, Mary, L. et al.; Needle & Rosenberg, P.C., The Candler Building, Suite 1200, 127 Peachtree Street, N.E., Atlanta, GA 30303-1811 (US).	
(22) International Filing Date: 13 May 1999 (13.05.99)		(81) Designated States: AU, CA, JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(30) Priority Data: 60/085,556 15 May 1998 (15.05.98) US		Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	
(71) Applicants (for all designated States except US): MUSC FOUNDATION FOR RESEARCH DEVELOPMENT [US/US]; 141 MUSC Complex, Suite 305, Cannon Park Place, Charleston, SC 29425 (US). THE GOVERNMENT OF THE UNITED STATES OF AMERICA, represented by THE SECRETARY, THE DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; National Institutes of Health, Office of Technology Transfer, Suite 325, 6011 Executive Boulevard, Rockville, MD 20852 (US). AMERICAN RED CROSS [US/US]; 15601 Crabbs Branch Way, Rockville, MD 20855 (US).			
(72) Inventors; and (75) Inventors/Applicants (for US only): ARGRAVES, William, S. [US/US]; 2544 Etiwah Avenue, Charleston, SC 29414 (US). BREWER, Bryan [US/US]; 10805 Pebble Brook Lane, Potomac, MD 20854 (US). REMALEY, Alan [US/US]; 4510 Traymore Street, Bethesda, MD 20814 (US). HAMMAD, Samar, M. [JO/US]; 54 Cedarhurst Avenue, Charleston,			
(54) Title: METHODS AND COMPOSITIONS FOR HDL HOLOPARTICLE UPTAKE RECEPTOR			
(57) Abstract <p>The present invention provides an isolated mammalian receptor which specifically binds a high density lipoprotein holoparticle, comprising a subunit of approximately 450-600 kDa molecular weight and one or more subunits selected from the group consisting of a subunit of approximately 40-50 kDa molecular weight, a subunit of approximately 120 kDa molecular weight and a subunit of approximately 400 kDa molecular weight. In addition, the present invention provides a method of screening a substance for the ability to modulate the HDL holoparticle binding and/or internalization activity of the receptor of this invention, comprising: a) contacting the substance with a cell producing a function HDL receptor; and b) assaying the cell for a modulation of the HDL holoparticle binding and/or internalization activity of the receptor, whereby a modulation of the HDL holoparticle binding and/or internalization activity of the receptor identifies a substance with the ability to modulate the HDL holoparticle binding and/or internalization activity of the HDL receptor.</p>			